



**Q:**

**The COP26 summit, which takes place in Glasgow next month [November] hopes to secure agreements to meet 2030 emissions reductions targets that align with reaching net zero by the middle of the century. With 21-22 per cent of the UK's total carbon emissions directly controlled by the built environment, the sector has a huge role to play. What should FM's hope to see coming out of COP26 and what contribution can the FM sector make to help address global warming?**

weather forecasts and energy costs. A dashboard of this data highlights energy inefficiencies and key performance gaps and will help FM's analyse and monitor the journey to achieve improvements in these metrics going forward.

To get the most from digitalisation and the potential for carbon savings, there are a few key things FM's should be aware of. Firstly, any digital solution should be applied to the whole system. Monitoring multiple sites, parameters and assets separately is not as effective as bringing these elements together into one integrated dashboard to better

**In FMJ's regular monthly column, our team of FM experts answer your questions about the world of facilities management**

**A:**

**DIGITAL SOLUTIONS PROVIDER'S VIEW**

**GIAMPIERO FRISIO, HEAD OF ABB'S SMART POWER BUSINESS**



COP26 represents an exciting opportunity for facilities managers, particularly if, as we suspect, new sustainability objectives are agreed that will accelerate action to drive energy efficiencies and further reduce CO<sub>2</sub> emissions. Setting more ambitious targets, or applying existing standards more universally, will encourage all of us to play our part to protect our planet for future generations.

FM's across the globe are already starting to realise the value that digitalisation brings, as a tool to fight climate change and manage energy efficiencies across the built environment.

Commercial and industrial building FM's have a pivotal role to play in reducing energy use and carbon emissions. To do this well though, they need to embrace innovative digital solutions that provide intelligent insight on how facilities are performing and identify where potential energy and cost saving improvements can be made. This is where digitalisation comes into its own, providing a golden thread to pull existing sustainability solutions together into one coherent, controllable system.

Digitalisation supports FM decision-making by providing a comprehensive view of energy consumption and asset condition as well as external variables such as

manage the complexities of energy demand and to scale up the energy savings achievable.

Secondly, digitalisation yields higher returns when coupled with Internet of Things (IoT) devices. Of course, digital solutions on their own can support baselining and help to identify where improvements can be made, but value creation happens when digital and hardware unite. This comprehensive approach has been used to great effect in our own Frosinone factory in Italy, where we have delivered 30 per cent energy savings and created a blueprint for other energy service companies to follow.

To future proof facilities, FM's can also stagger their digital journey, taking a step-by-step approach to implementing a fully digital solution. For example, retrofitting sensors in phases will allow FM's to make a start on increasing energy efficiencies, saving costs and reducing emissions as they build in extra functionality.

It is also worth noting that digitalisation can increase the life span of key devices, including breakers, switches and motor starters, as it improves asset maintenance and monitoring. It is also a big business benefit as there is less downtime and unplanned maintenance and FM's benefit from lower capex on replacement equipment.

Ultimately digitalisation and the ability to keep assets up and running for longer are strictly related: improved digitisation means FM's are better prepared for the expected and the unexpected.

By embracing the potential of digitalisation, FM's can play a key role in the fight against climate change. With the right information at their fingertips, they can

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*Giampiero Frisio*

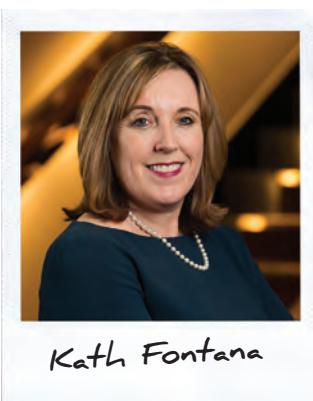
also make huge strides towards delivering a net zero future for us all.

FMJ & Andrea Temporiti, Head of Digital for ABB Electrification will present a webinar: Data – the human element in a sustainable future on 28 October at 11am. Register here: <https://bit.ly/3lQswUW> □

**FM SERVICES SUPPLIER'S VIEW**

KATH FONTANA, MANAGING DIRECTOR OF MITIE PROJECTS

COP26 offers an opportunity for countries around the world to share ideas, plans and best practice on how they will reach net zero by 2050. While the UK has already taken a major step by committing to cut its carbon emissions by 78 per cent by 2035, it's still missing a plan on how it will decarbonise the built environment, which accounts for a significant part of the nation's carbon footprint.



Kath Fontana

Decarbonising the built environment is not only a challenge for Government, but businesses too. This is why we hope that this COP will be an opportunity for countries to discuss how they are planning to tackle this challenge and, more importantly, declare their support for businesses decarbonising their operations and estates too.

We know that reaching net zero for the built environment is not something any business can do alone – customers, FMs, landlords and the public sector must all come together. Our first-hand experience as facilities management experts, with significant building management and energy expertise, enables us to advise which solutions are best suited to which buildings. And our operational focus means we know the challenges that organisations face when rolling out these initiatives.

Customer demand for new infrastructure to generate renewable power, such as solar panels and battery storage, and for new green energy contracts is high. With expertise in these areas, we're playing an instrumental role in supporting our customers in tackling climate change.

However, when it comes to becoming truly net zero, focusing on renewable energy is not enough, businesses will also have to face the challenge of replacing gas heating systems at their sites. Installing solutions, such as ground and air source heat pumps, often have high upfront costs, meaning that without an adequate budget to cover these costs or access to

government funding, many organisations may need to either slow or stop their journey to a net zero estate.

Even organisations with the CAPEX budget to invest in heat pumps may still struggle to justify the expense due to large OPEX costs. The reason for this is that gas is significantly cheaper than electricity, in part due to the Climate Change Levy for gas being significantly lower than for electricity. This may put businesses in a difficult position of having both high upfront costs and increased energy bills – with operational and capital budgets often managed separately, many organisations find that they simply can't cover the additional costs of switching to green electricity to heat their sites.

Our hope for COP26, and beyond, is that the UK Government offers more support for businesses trying to decarbonise their operations, helping them to overcome challenges like these. This could be done by providing funding to help businesses make green capital investments, as well as transferring the Climate Change Levy from carbon emitting gas to clean electricity to encourage more businesses to decarbonise their power.

All these financial initiatives are essential for decarbonising the built environment. And while they may seem particular to the UK, financial considerations are roadblocks for businesses in every country. This is why it's important that this year's COP is used as an opportunity to learn what other nations are doing to overcome these challenges and drive net zero among businesses. These lessons, alongside the experience and expertise of FM providers and energy managers, will be key for decarbonising Britain. □

**ENERGY SUPPLIER'S VIEW**

DAVID CARROLL, SENIOR CORPORATE ACCOUNT MANAGER, GAZPROM ENERGY

Currently, the price of renewable technology and green products present a barrier to entry for many UK companies looking to become greener. Green energy comes at higher prices and results in increased procurement costs. It would be encouraging to see greater support from the government with regards to subsidies and investment in green and renewable energy following COP26 to support facilities on their journey towards decarbonisation. Support could include schemes such as financial benefits for those who choose green tech and further financial penalties for the biggest emitters.



David Carroll

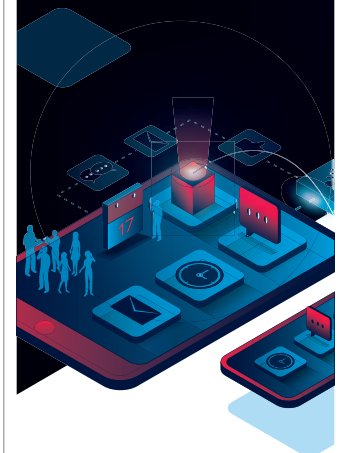


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As well as financial support, power purchase agreements (PPA) with renewable generators should be made more accessible for small or low energy consuming companies. This could be done through the use of energy baskets, which are an ideal choice for businesses whose energy usage is not always high enough to secure a standalone PPA agreement with a supplier. These would allow a group of businesses to pool their tradeable volume with other small customers to improve their buying power by purchasing renewable energy in larger quantities to the benefit of all involved. This is an emerging market, but we need to see large and rapid market growth in this sector to ensure every commercial energy consumer has the ability to easily procure green energy directly from renewable generators, as well as the ability to manage it accurately and efficiently.

Additionally, on-site PPAs is another area that could be subsidised further by the government, with renewable energy being generated on-site and any surplus being stored in a battery or sold back to the grid. Investing in tech generally should be a priority, as energy continues to transition away from being a commodity and moves at an increasing pace towards becoming a technology.

Awareness and education around climate change have increased in recent years, but there must be a continued and enhanced focus on this by the government. Wider and more accessible education aimed across the business community as well as the general public, sponsored by the government, will lead to more action. It is easy to delay resolving issues and ignore them if the dangers and impacts of how we currently live are not being constantly reiterated.

In summary, definitive action towards minimising the carbon footprint of the built environment needs to be facilitated by increased access to renewable energy and more funding from the government, which we hope facilities managers will see following COP26. To drive improved collective industry action and to ensure that everyone is fully aware of the implications of climate change, it must remain front-page news until we have made significant progress across the world. □

**THE RICS FM CHAIR'S VIEW**

RORY MURPHY,  
COMMERCIAL  
DIRECTOR, VINCI  
FACILITIES & CHAIR OF  
THE FM PROFESSIONAL  
GROUP BOARD WITHIN  
THE RICS



The headline goal of COP26 is to secure net zero by 2050, and countries are being tasked with submitting ambitious targets for reducing emissions by 2030. Countries need to specifically consider, phasing out coal, curtailing deforestation, accelerating the switch to electric vehicles and encouraging investment in renewable energy sources. These are all ambitious targets and are pointed very much at policy makers and Governments but those of us that work across the built and natural environment can make a significant impact by just focussing on the headline goal of achieving net zero (net zero means reducing

emissions in line with latest climate science and balancing remaining residual emissions through carbon removal credits).

The overarching principles of a sustainable approach to the built environment are no different to the principles we need to apply to our own personal lives - do we need that new product? Can we make do with what we have? Can we adapt how we do things? How resilient are our processes? Can we recycle? Can we minimise waste? Can we reduce or substitute our resource demands for energy and water? The challenge for FM professionals is no different, but what COP26 will deliver, is the necessity for all of us to measure our current impact, set specific science-based targets for the future and then monitor and track our progress towards achieving the targets we set.

The development of a plan is the first step and then the opportunities for improvements will flow. The impetus that will be created by COP26 may well lead to a 'green revolution' in our sector, driven by the necessity to clearly understand the performance of assets, something we have done within the FM sector for many years. The need to measure, mitigate and improve building performance will require a rich and robust data set, it will need a full understanding of the complex relationship between the asset, its usage and the requirements of the end users and wider stakeholders, allied with a detailed knowledge of how that building's performance can be improved through expert adaptation in to the future. Investment will be key, and FM professionals (and their customers) will need to take a longer-term view of the solutions required and have a clear understanding of what government support or funding may be available.

COP26 may well be a catalyst for change, but we are already seeing an increasing demand for greener assets and the linkage between an asset's performance in terms of ESG and its value. In the most recent RICS Global Sustainability report around 60 per cent of respondents indicate an increase in demand from occupiers for greener building stocks whilst across Europe 75 per cent of respondents noted an increase in investor demand for similar assets. This focus on the sustainability performance of the built environment is seen as driving a 'green premium' where demonstrable improved sustainability performance will drive higher rent. Those assets that are not improved from an environmental perspective, but which also do not consider the wider socio-economic impact of their existence will decrease in value and eventually become stranded assets as investors and owners alike look for property types that enhance their portfolio and their own sustainable approach to business.

FMs have a fundamental role to play in supporting our sector strive for net zero – and we should also stress that as a sector we should be addressing the wider UN Sustainable Development Goals as well – and this challenge comes with huge opportunities to benefit from a 'green revolution' that not only supports our environmental imperatives but also has the potential to drive economic and social improvements across all our communities. □



Do you have a question that you'd like answered by the FMJ Clinic?  
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